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REMARKS

This amendment is in response to the Office Action mailed on June 18, 2004 wherein Claims 1-4, 6, and 8-12 were rejected. Claims 1, 5, 6, and 10 have been amended and Claims 1-6, and 8-12 remain pending.

Claim Rejections Under 35 USC §102 and 103

On page 3 of the Final Office Action, the Examiner rejected Claims 1, 2, 4, 6 and 8-12 under 35 USC §102(b) as being anticipated by Iijima et al. On page 4 of the Office Action, Claim 3 was rejected under 35 USC §103 as being unpatentable over Iijima et al. in view of Carpenter.

In column 1, lines 48-51, Iijima et al. expressly discloses that the d and q axis magnetizing components are equal and therefore the second term of equation 2 in Iijima et al. is zero. Iijima et al. is silent with respect to, and in fact teaches away from, controlling the d or q axis components as a function of β to magnetically saturate the electric motor, as Iijima expressly assumes that the d and q (L_d and L_q) axis magnetizing components are zero. The present invention recognizes that at high stator current levels, when the effects of magnetic saturation cannot be neglected, the two magnetizing inductances will have different values where L_d is not equal to L_q . In the present case, the difference ($L_d - L_q$) is not zero, and additional torque can be obtained from the motor by controlling the d and q axis current components as a function of β . Iijima is completely silent with respect to magnetically saturating a permanent magnet rotor and then controlling the d and/or q axis current. Iijima et al. and Carpenter do not teach or suggest the present invention.

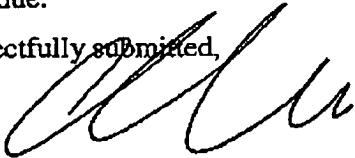
Conclusion

The entire Office Action dated June 18, 2004 has been carefully reviewed, and this response is submitted as being fully responsive thereto. In view of the preceding remarks, Applicants respectfully submit that Claims 1-6, and 8-12 remain pending are in condition for allowance and respectfully request such action at the Examiner's earliest convenience. If the Examiner believes that personal contact would be advantageous to the disposition of this case, he is requested to call the undersigned at his earliest convenience.

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If for some reason a fee needs to be paid, as well as two-month extension please charge
Deposit Account No. 07-0960 for the fees, which may be due.

Respectfully submitted,



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